

## I. INTRODUCTION

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The City of Redmond faces important policy questions as it approaches the urban growth and development that is almost certain to occur during the next two decades. In addition to policy concerns expressed in Redmond's Comprehensive Plan, Washington State's Growth Management Act (GMA) requires that municipal levels of service not be reduced to accommodate the demands of growth. GMA requires that development must, when taken either as a whole or as individual projects, "pay its own way". As a consequence of the Comprehensive Plan policy and the GMA requirements, Redmond seeks to determine the magnitude of potential fiscal impacts associated with growth, and derive appropriate policy actions to address them.

The Cost of Growth Model (CGM) project was completed in two phases. *Phase 1* involved an effort to validate the initial conception of the Cost of Growth Model (as expressed in the *Requests for Proposals* issued by the City in March 1996) and to reveal trends, information, procedures, and opinions within the City that would influence the preparation and/or the application of the CGM. The *Phase 1 Report* confirmed that many of the concerns expressed by City staff and policy makers regarding the impacts of growth on the City were well founded. Maintaining existing municipal service levels and managing the growth process will present the City with some significant challenges.

In *Phase 2*, Economic & Planning Systems, Inc. (EPS), worked closely with City staff to construct and refine the "Cost of Growth Model" (CGM). Two reports have been prepared as part of the *Phase 2* effort. First, EPS prepared a *Six Year Budget Forecast* using the CGM to support the 1997 budget process. This second *Phase 2 Report* documents the City's effort to construct a "Cost of Growth Model" (CGM) and presents the results of three typical applications of the CGM:

- A Baseline Forecast for the City of Redmond. The Baseline Analysis is a 20 year forecast of municipal costs and revenues presuming continued development as defined by the Comprehensive Plan and current City fiscal policies.
- A Neighborhood Case Study which focuses on the annexation of the Plateau. The neighborhood analysis evaluates the fiscal impacts of development at the neighborhood-level. The case study presented in this report evaluates the effects of the annexation of the presently unincorporated Plateau.
- A Project Case Study which evaluates the fiscal effects of the Town Center Project. The project-level analysis evaluates the fiscal impacts of the development of a specific project proposed for development in the City. The case study presented in this report evaluates the effects of the Town Center Project, a large commercial project currently under construction in Redmond. The Project Case study also includes a comparison of the fiscal impact of the original approved Master Plan and a scenario with less retail space.

In addition to this report, the Cost of Growth Model study also includes the installation of the model at the City, training of City staff to operate the model, and documentation of the model. Model documentation is presented under separate cover.

## SUMMARY OF KEY FINDINGS

- With the installation of the CGM, the City now has a state-of-the-art computer model to assist with its on-going land use and financial management responsibilities. The City will be able to use the CGM to support ongoing project review, administrative activities, and policy analysis. The CGM is designed to inform policy makers whether new development (or total City development) is generating sufficient municipal revenue to cover costs associated with providing desired levels of public services.
- The *Baseline Forecast* produced by the CGM indicates that if revenue policies remain constant and current levels of service and service delivery methods are maintained, annual municipal service costs will exceed the annual municipal revenues during the next 20 years.
- The *Baseline Forecast* reveals that the City will need to make changes in its land use policies, service delivery, and/or revenue policies during the next 20 years to maintain historical budget commitments and achieve other budget and investment priorities (e.g., build sufficient replacement reserves).
- The Plateau Annexation Case Study indicates that the cost of providing municipal services to the Plateau will exceed the projected revenues by over \$1 million per year.
- The Town Center Case Study prepared by the CGM indicates that the revenues generated by the Town Center Project will exceed the cost of providing municipal services by \$400,000 per year in the initial year of occupancy. The surplus is projected to increase to approximately \$1.0 million per year at full occupancy.

## CONCEPTUAL FRAMEWORK

The issues surrounding the costs of growth have been hotly debated and studied in the United States for at least the last 20 years. The erosion of aid to local governments from state and federal sources during the past 15 years have only sharpened the debate, as reflected in the recent controversy over adoption of the GMA mandated Comprehensive Planning Policies (CPPs) by King County. At the same time, citizens continue to expect high levels of municipal services while reluctant to increase local taxes.



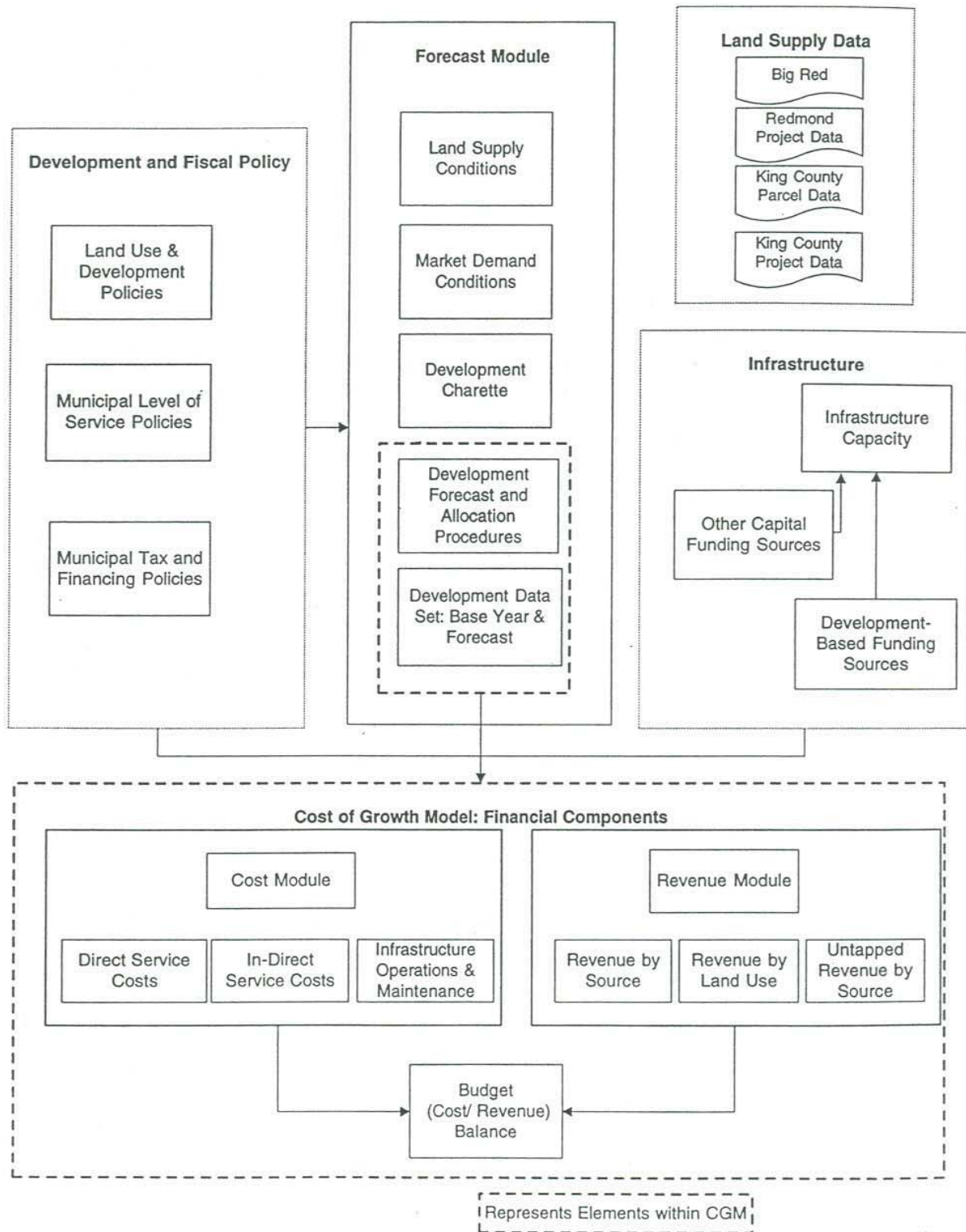
As a result of these trends, fiscal impact analysis, (the forecasting of government service costs and public revenues related to growth), has become a common part of comprehensive planning and development project review. Key questions raised include:

- ☐ What are the expected marginal increases in costs and revenues derived from new development, e.g., how does adding an acre of park land affect the Parks and Recreation annual park maintenance and operations budget?
- ☐ To what extent should new development pay for its marginal cost of services or otherwise support existing costs?
- ☐ How should fixed overhead and social service costs unrelated to development be allocated?
- ☐ How should a city balance fiscal "winners" and "losers" e.g.; those land uses that create positive fiscal balances, such as certain commercial projects, versus those land uses that create negative fiscal balances, such as certain residential projects, while recognizing that both are required to create a sustainable City? In other words, how should the City strive for a balance between jobs and housing?
- ☐ How should the City balance the need for economic growth with "quality of life" issues such as the need for parks and open space, recreation programs, public amenities, clean air, transit and transportation improvements?

Given the complicated nature of these questions, Redmond's Cost of Growth Model has taken a systems approach which takes account of independent factors such as regional growth trends and local market characteristics, developable land supply and environmental factors, infrastructure investment, City policies regarding land use, housing, service levels, and revenue. Figure 1 presents a conceptual framework of how these factors interact and how they "link" with each other. As shown in Figure 1, there are five major components of the Cost of Growth Model. The sub-components and relationships between each component are reflected on the flow chart and are described below.

1. **Land Supply Data:** This component links regional growth trends (e.g., as defined by the Puget Sound Regional Council (PSRC), "pipeline" development projects (as defined by the Redmond and King County project data), existing development on the ground (as defined by the City's parcel database known as *Big Red*, the City's land use database and tax assessor records, and King County parcel data from tax assessor records). In combination this data determines the "effective" supply of developable land in the community.
2. **Forecast Module:** This component links total vacant and under-utilized land supply with physical or environmental constraints (wetlands, topography, etc.) which limit usefulness for urban development, local real estate market conditions, and the "effective" supply of developable land. In combination, these factors form the basis of the projected development path for the community.

**Figure 1**  
**Conceptual Framework**  
**Redmond Cost of Growth Model**





3. **Infrastructure:** This component links existing infrastructure and public facilities' capacity, (e.g., roads, sewer and water systems, parks, fire stations, and office space for City employees), planned increases in this capacity, and funding sources for these improvements. The infrastructure component helps determine the "effective" land supply and recurring operations and maintenance costs. New infrastructure is often required to increase the "effective" land supply. Likewise, new infrastructure will increase the amount of facilities that must be operated and maintained by the City, thus increasing operating budgets.
4. **Development and Fiscal Policy:** This component links the broad dimensions of City policies regarding land use development, infrastructure improvements, municipal service levels, and tax policy. These policies influence effective land supply (e.g., the Comprehensive Plan, and Zoning Ordinance, etc.), infrastructure and service expenditures (e.g., the Capital Improvement Program (CIP)), and the taxes, charges and fees levied by the City.
5. **Cost of Growth Model - Financial Component:** This component uses the outputs of the first four components to estimate future recurring City budget costs and revenues. A computerized cash flow model is the technical core of the Cost of Growth Model. The cash flow model quantifies the relationship between growth and demographic factors, land use policies, land use development, infrastructure improvements, and reflects the operating costs and revenues associated with providing a given level of municipal services to the residents and businesses within the City. The fiscal cash flow uses a combination of average and marginal cost factors to project the costs and revenues associated with future development in the City.

## TECHNICAL APPROACH

As described in the introduction of this report the Cost of Growth Model (CGM) project was completed in two phases. The *Phase 1 Report* confirmed many of the concerns expressed by the City's User's Group (the ad hoc committee set up to consider the utility, applications, and specifications of the Cost of Growth Model). There is clearly a need to better inform policy makers with respect to the impacts of growth. This is especially true given the large amount of "pipeline" development that has already been approved. Simply managing the growth process and serving this amount of growth in the near future will be challenging. Although the City has responded successfully to growth pressures in the past in a variety of ways and is continuing to maintain and improve services as growth has occurred, the City may not be able to do so in the future. For example, the City has established a number of plans and programs to accommodate and manage future development; however, these plans and programs may not be fully coordinated and may not be affordable in the long run. The Cost of Growth Model addresses these issues and informs policy makers regarding the cost and revenue implications of their decisions.

Following presentation of the *Phase 1 Report*, a decision was made by the Administration and City Council to proceed with *Phase 2*, the development and application of the CGM, which included development of the cash flow model application and the related cost and revenue research. Key areas of research included sub-regional land supply analysis and preparation of a development forecast; detailed analysis of departmental operations and maintenance costs; and analysis of municipal revenues and their underlying estimating relationships.

During the deliberations regarding the 1997-1998 Biennial Budget, an initial application of the Cost of Growth Model was prepared. The *Six Year Cost and Revenue Forecast Report* was prepared using an initial version of the CGM. The Forecast was based upon City costs for services as expressed in the 1996 Budget and a short-term development forecast reflecting primarily "pipeline" development projects. The Forecast indicated, among other findings, that the amount of General Fund revenue allocated to capital projects was unsustainable in the near future, given the expected increases in City costs and the constraints being imposed upon key City revenue sources (e.g., sales taxes and property taxes). The adopted Budget made adjustments to key costs and revenues to respond to some of the problems identified.

Following preparation of the *Six Year Cost and Revenue Forecast Report* a longer term *Baseline Forecast* was prepared along with two *Case Studies*, as documented in this *Phase 2 Report*. This version of the CGM includes the following key refinements.

- ☐ The CGM base year data was updated to reflect the level of effort set forth through the preliminary 1997 budget commitments included in the 1997-1998 Biennial Budget.
- ☐ The CGM development forecast was extended to a 20-year period and refined to reflect land supply constraints on a neighborhood level.
- ☐ All costs and revenues were projected over a 20-year period.
- ☐ The assessed valuation forecast for Fire District 34 was refined to reflect projected development in the unincorporated areas of the District.
- ☐ The cost forecast was refined to reflect projected real dollar increases in salary and benefit costs faced by the City.
- ☐ The demand for police services were modified to reflect calls for service by land use.
- ☐ The sales tax projection was updated with the most current sales tax data which better reflects the effects of recent State legislation that provides sales tax exemptions to research and development activities.
- ☐ The CGM was modified to assign costs and revenues at the neighborhood-level and project-level. The estimating methods used for the neighborhood-level and project-level analysis are identical to those used for the Citywide analysis. As a result, the assignment of costs and revenues at the neighborhood-level and project-level reflects both the incidence of the activity, demand for service and revenue generating potential. Costs such as road maintenance and police service are allocated at the neighborhood-level and project-level based on the physical location of the facility, (roads and parks



(annexation areas only)) or the local demand for the service or the activity. Other costs that are predicated based upon a Citywide system and benefit all areas, such as recreation services, fire service and general government are projected for the City using marginal cost methods and then allocated to the neighborhood-level and the project-level based on the demand for service. The majority of the revenues, including property tax, sales tax, utility taxes, and business license tax are based on the revenue-generating capacity of the development at the neighborhood-level and the project-level. Grants and interfund service fees which are not site-specific are allocated at the neighborhood-level and project-level based on daytime population factors.

Overall, the results of this *Phase 2 Report* demonstrate the capabilities of the Cost of Growth Model and provide policy guidance regarding land use and fiscal issues faced by the City. Concurrently with consideration of the initial applications of the CGM, a version of the Model is being installed at the City. City staff will maintain the Model and provide, on a ongoing basis, applications of the model that will answer questions raised by policy-makers regarding the impacts of development projects, land use plans, annexation proposals, capital investments, and budgetary commitments, as these questions arise. The cost and revenue estimating procedures used in the CGM and other key model assumptions are described in the Documentation Report.